

IN THE CLAIMS:

Amend the claims to read as indicated below.

1. (currently amended) An ultrasound imaging system ~~10~~, comprising:

a processing system ~~12~~ configured to generate ultrasound energy and to detect signals at ultrasound frequencies; and

an ultrasound scan head ~~40~~ electrically coupled to the processing system ~~12~~, the ~~assembly 30~~ scan head including an ultrasound transducer array operatively coupled to a positional actuator ~~42~~ having a driven member that rotates in a constant direction about a first axis to pivot-oscillate the array about a second axis substantially perpendicular to the first axis, the positional actuator further including a first pivot axis orthogonally intersecting the second axis and a second pivot axis rotating about the first axis and intersecting the first axis at a constant non-orthogonal angle.

2. (currently amended) The imaging system ~~10~~ of claim 1, wherein the ultrasound scan head ~~40~~ includes a positional sensor ~~44~~ coupled to the driven member that is configured to detect a rotational position of the driven member.

3. (currently amended) The imaging system ~~10~~ of claim 2, wherein the processing system ~~12~~ further includes a controller ~~26~~ electrically coupled to the positional actuator ~~32~~ to transmit positioning signals to the actuator ~~32~~, and to receive positional signals from the positional sensor ~~34~~.

4. (currently amended) The imaging system ~~10~~ of claim 1, wherein the ultrasound transducer array ~~30~~ comprises a planar arrangement of ultrasound transducer elements.

5. (currently amended) The imaging system ~~10~~ of claim 1, wherein the ultrasound transducer array ~~30~~ comprises a linear arrangement of ultrasound transducer elements that is curved along a length of the array.

6. (currently amended) The imaging system ~~10~~ of claim 3, further comprising a display coupled to the controller, the display operable to visually display ultrasound images generated by the processor ~~42~~.

7. (canceled)

8. (canceled)

9. (currently amended) The ultrasound ~~scan-head~~ imaging system of claim ~~7~~ 1, wherein the positional actuator ~~42~~ includes a crank member ~~56~~ coupled to ~~a drive shaft 48~~ the driven member, the crank member ~~56~~ having a receiving portion angled inwardly towards the first rotational axis, and ~~the pivot member 60 includes a coupling; the crank member 56 being coupled to the a pivot member aligned with the first pivot axis 60~~ by a connecting member ~~58~~ that is rotatably received by the ~~receiving portion~~ crank member at one end, and ~~hingeably received~~ coupled to the pivot member by the coupling at an opposing end.

10. (currently amended) The ultrasound ~~scan-head~~ imaging system of claim 9, further comprising:

a cover ~~70~~ positioned proximate to the array that at least partially defines an internal volume ~~72~~ that contains the array ~~30~~, the internal volume ~~72~~ sealably containing a volume of an acoustic coupling fluid.

11. (currently amended) The ultrasound ~~imaging system~~ scan-head ~~40~~ of claim 10, wherein the internal volume ~~72~~ includes an expandable bladder ~~76~~ that adjusts to variations in the volume ~~72~~ of the acoustic coupling fluid.

12.-20. (canceled)